layer **40** and display module **42**. Electrical components **48** may be mounted on printed circuit **46** within housing **12**. Housing **12** may have rear housing wall **12**R and sidewalls **12**W. Sidewalls **12**W may be vertical sidewalls and/or may be curved sidewalls. Carbon nanotube structure **200** (e.g., a layer of carbon nanotubes such as carbon nanotube layer **60**, etc.) may extend between respective sidewalls **12**W and may span the interior of housing **12**.

Carbon nanotube structures **200** may, for example, form a carbon nanotube housing midplate. The carbon nanotube midplate may be formed from carbon nanotubes, a substrate (e.g., metal, plastic, etc.), metal layer(s), polymer layer(s), or other suitable materials (see, e.g., FIGS. **5**, **6**, **7**, and **8**). With one suitable arrangement, carbon nanotube structures **200** may form a planar sheet that is connected to housing sidewalls **12**W with connections **202**. Connections **202** may include mounting brackets, fasteners such as screws, welds, solder, adhesive, or other attachment mechanisms. The presence of carbon nanotube midplate in housing **12** may help provide housing **12** and device **10** with structural rigidity (e.g., torsional rigidity. Components may be packed into the interior spaces of device **10** above and below the carbon nanotube midplate and may help further enhance rigidity.

Carbon nanotubes can be strong and light, so the use of a carbon nanotube midplate may allow the size of device **10** to be minimized. If desired, carbon nanotubes may be provided in other electronic device structures to provide enhanced strength. Carbon nanotube layers may be patterned to form sheets and other thin layers, structures with curves (e.g., brackets), traces on dielectric support structures, and portions of other structural members in device **10**. The use of a carbon nanotube layer (e.g., layer **60**) to form a structural midplate member in the housing of device **10** (e.g., a portable device such as a cellular telephone, etc.) is merely illustrative.

The foregoing is merely illustrative and various modifications can be made by those skilled in the art without departing from the scope and spirit of the described embodiments. The foregoing embodiments may be implemented individually or in any combination.

What is claimed is:

1. A carbon nanotube flexible printed circuit, comprising:
- a first polymer layer;
- carbon nanotube signal paths on the first polymer layer;
- metal solder pads on portions of the carbon nanotube signal paths, wherein the metal solder pads are in direct contact with the carbon nanotube signal paths; and
- a second polymer layer on the first polymer layer, wherein the metal solder pads comprise first and second metal solder pads on respective first and second opposing ends of one of the carbon nanotube signal paths, wherein the second polymer layer has first and second openings that are respectively aligned with the first and second metal solder pads, and wherein the first and second polymer layers comprise molded portions that maintain a bend in the carbon nanotube signal paths.

2. The carbon nanotube flexible printed circuit defined in claim **1** wherein the carbon nanotube signal paths are interposed between the first polymer layer and the second polymer layer.

3. The carbon nanotube flexible printed circuit defined in claim **2** wherein the metal solder pads comprise electroplated metal.

4. The carbon nanotube flexible printed circuit defined in claim **3** further comprising a stiffener under at least some of the metal solder pads.

5. The carbon nanotube flexible printed circuit defined in claim **4** wherein the stiffener comprises a layer of metal attached to the first polymer layer with a layer of adhesive.

6. The carbon nanotube flexible printed circuit defined in claim **1** further comprising a first layer of adhesive between the first polymer layer and the carbon nanotube signal paths and a second layer of adhesive between the second polymer layer and the carbon nanotube signal paths.

7. A carbon nanotube flexible printed circuit, comprising:
- a first polymer layer with first and second opposing sides;
- a carbon nanotube signal path on the first side of the first polymer layer, wherein the carbon nanotube signal path has first and second ends;
- a first metal solder pad on the first end of the carbon nanotube signal path;
- a second metal solder pad on the second end of the carbon nanotube signal path, wherein the carbon nanotube signal path electrically connects the first metal solder pad to the second metal solder pad; and
- a stiffener formed under at least the first metal solder pad, wherein the stiffener is formed on the second side of the first polymer layer.

8. The carbon nanotube flexible printed circuit defined in claim **7**, further comprising:
- a second polymer layer on the first polymer layer, wherein the carbon nanotube signal path is interposed between the first and second polymer layers.

9. The carbon nanotube flexible printed circuit defined in claim **8**, wherein the second polymer layer has a first opening that is aligned with the first metal solder pad and a second opening that is aligned with the second metal solder pad.

10. The carbon nanotube flexible printed circuit defined in claim **7**, wherein the first and second metal solder pads are in direct contact with the carbon nanotube signal path.

11. The carbon nanotube flexible printed circuit defined in claim **8**, wherein the first and second polymer layers comprise molded portions that maintain a bend in the carbon nanotube signal path.

12. The carbon nanotube flexible printed circuit defined in claim **8**, wherein the first and second polymer layers have a bend and wherein the carbon nanotube signal path is bent along the bend.

* * * * *